

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Original) A method for detecting a data cartridge in a cartridge engaging assembly,
2 comprising:
3 emitting a signal from a signal emitter on the cartridge engaging assembly into a chamber
4 formed within the cartridge engaging assembly;
5 detecting at least a portion of said emitted signal when said emitted signal is reflected
6 from the data cartridge; and
7 generating output to indicate whether said data cartridge is present in said cartridge
8 engaging assembly based on said detected signal.
- 1 2. (Original) The method of claim 1, wherein emitting the signal is at least during start-up.
- 1 3. (Original) The method of claim 1, wherein emitting the signal is at least during power-up
2 of the cartridge-engaging assembly.
- 1 4. (Original) The method of claim 1, further comprising focusing said signal for detection.
- 1 5. (Original) The method of claim 1, further comprising deciphering a color of said data
2 cartridge based on said detected signal.
- 1 6. (Currently Amended) A data cartridge detection system, comprising:
2 a cartridge engaging assembly for receiving a data cartridge therein;
3 a signal emitter ~~operatively associated with~~ mounted to said cartridge engaging assembly,
4 said signal emitter producing a signal that is reflected by the presence of the data cartridge within
5 said cartridge engaging assembly; and
6 a signal detector operatively associated with said cartridge engaging assembly, said signal
7 detector being responsive to the reflected signal ~~produced by said signal emitter and for~~
8 indicating that the data cartridge is present in said cartridge engaging assembly.

1 7. (Original) A data cartridge detection system, comprising:
2 means for receiving a data cartridge therein;
3 means for emitting a signal positioned on said means for receiving; and
4 means for detecting said signal when said signal is reflected from the data cartridge, said
5 means for detecting mounted to said means for receiving, wherein said means for detecting
6 generates output to indicate whether said data cartridge is present in said means for receiving
7 based on said detected signal.

1 8. (Original) The system of claim 7, wherein said means for emitting comprises a light
2 source.

1 9. (Original) The system of claim 7, wherein said means for detecting comprises a light
2 detector.

1 10. (Currently Amended) A method comprising:
2 detecting a signal reflected from a data cartridge in a picker assembly; and
3 moving the picker assembly after a loading operation [[only]] if the detected signal
4 indicates the data cartridge is engaged in the picker assembly.

1 11. (Currently Amended) The method of claim 10, further comprising moving the picker
2 assembly after an unloading operation [[only]] if the detected signal indicates the data cartridge
3 is disengaged from the picker assembly.

1 12. (Original) The method of claim 10, further comprising determining a color of the data
2 cartridge.

1 13. (Original) The method of claim 10, further comprising identifying a type of the data
2 cartridge.

1 14. (Original) The method of claim 10, further comprising identifying a type of the data
2 cartridge based on a color of the data cartridge.

1 15. (Currently Amended) A media storage system comprising a signal detector responsive to
2 a signal emitted into a picker assembly, said signal detector indicating during a loading operation
3 that a data cartridge is engaged in said picker assembly, wherein before said picker assembly is
4 movable between different locations in the media storage system ~~can be moved~~.

1 16. (Currently Amended) The media storage system of claim 15, wherein said signal
2 detector indicates during an unloading operation that the data cartridge is disengaged from said
3 picker assembly ~~before said picker assembly can be moved~~.

1 17. (Currently Amended) The media storage system of claim 15, further comprising a
2 processor determining when the data cartridge is engaged in said picker assembly.

1 18. (Currently Amended) The media storage system of claim 15, further comprising a color-
2 deciphering component determining a color of the data cartridge in said picker assembly.

1 19. (Currently Amended) The media storage system of claim 15, further comprising a
2 processor identifying a type of the data cartridge.

1 20. (Currently Amended) The media storage system of claim 15, further comprising a
2 processor identifying a type of the data cartridge based on a color of the data cartridge.

1 21. (New) The method of claim 1, further comprising moving the cartridge engaging
2 assembly between first and second positions in response to the generated output indicating that
3 the data cartridge is present in the cartridge engaging assembly.

1 22. (New) The data cartridge detection system of claim 6, wherein the cartridge engaging
2 assembly is movable between different locations within a media storage system in response to
3 the reflected signal.

1 23. (New) The data cartridge detection system of claim 6, further comprising a computer
2 board on the cartridge engaging assembly, the signal emitter mounted on the computer board.

1 24. (New) The data cartridge detection system of claim 6, wherein the signal detector is
2 adapted to detect a color of the data cartridge.

1 25. (New) The data cartridge detection system of claim 6, wherein the signal detector is
2 adapted to detect a characteristic of a surface of the data cartridge.